

Work Order ID 63603

Thursday, November 04, 2010 1:00:18 PM



Page 1

Item ID: D3245-2

Accept



Setup Start



Revision ID:

Stop



Item Name: Panel

Start Date: 11/4/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 11/15/2010 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

PL

Date: 10/11-04

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3245	Rev B

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3245 ****prog.D3245-1/-2**** ☐ Dwg

Rev: B ☐ Prog Rev: B ☐ 2-Debur if necessary

304 .032

HB 10-11-18

④

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

HB 10-11-18

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

Solulib

②4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63603

Thursday, November 04, 2010 1:00:18 PM

Page 2

Item ID: D3245-2

Accept

Revision ID:

Item Name: Panel

Setup Start

/ Stop

Start Date: 11/4/2010 Start Qty: 4.00

Required Date: 11/15/2010 Req'd Qty: 4.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130



Brake NC

Brake NC

NC BRAKE

Memo

Deburr if necessary ☐ C'sink as per Dwg D3245 ☐ Form D3245-1 as per Dwg D3245 Identify as D3245-1

0.00

0.00

Tool ID

Tool #

Plan

Code

Accept

Qty

Reject

Qty

Reject

Number

Insp.

Stamp

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

150



Packaging

Packaging

Identify as per dwg & Stock Location **233A**

Memo

0.00

0.00

ES 10/12/02 **(4)**

ES 10/12/02 **(4)**

(x8)

-2

10/12/02 **(4)** *sf*

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Work Order ID 63603

Thursday, November 04, 2010 1:00:18 PM



Page 3

Item ID: D3245-2

Accept



Setup Start



Revision ID:

Stop



Item Name: Panel

Start Date: 11/4/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 11/15/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 QC	QC21- Final Inspection - Work Order Release	0.00							
Quality Control	Memo	0.00							

10/12/03

Pl 10-12-02
(4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, November 04, 2010 1:00:22 PM

Page 1

Work Order ID: 63603

Parent Item: D3245-2

Parent Item Name: Panel





Start Date: 11/4/2010

Required Date: 11/15/2010

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP A 04.07.07 New issue KJ/JLM
IPP Rev:b ECN 1052 07-10-31 DD verified by:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S22GA		Purchased	No			100	sf	85.5896	0.804	3.385263			
													

304/316 .032 Sheet

KB10-11-18

Location

Loc Qty

Loc Code

MAT20

85.5896

109023

30.2896

109057

55.3

109057

④

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	63603
Description: Doubler		Part Number:	D3245-2
Inspection Dwg: D3245 Rev: B		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	1.100	✓		✓ HB 02	
Ø0.375	+0.006/-0.001	3.376	✗		✓	
0.400	+/-0.010	4.400	✓		✓	
1.117	+/-0.010	1.120	✗		✓	
1.150	+/-0.010	1.148	✗		✓	
1.000	+/-0.010	1.000	✗		✓	
10.57	+/-0.030	10.573	✗		V PRO HB 02	
9.500	+/-0.010	9.502	✗		V PRO HB 02	
8.350	+/-0.010	8.350	✗		V PRO HB 02	
3.500	+/-0.010	3.498	✗		✓	
9.40	+/-0.030	9.403	✗		V PRO HB 02	
11.04	+/-0.030	11.048	✗		V PRO HB 02	
6.200	+/-0.010	6.196	✗		✓	
2.230	+/-0.010	2.237	✗		✓	
2.020	+/-0.010	2.020	✓		✓	

Measured by:	B	Audited by:	S	Prototype Approval:	N/A
Date:	10-11-18	Date:	10/11/18	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.09.04	New Issue	KJ/DD	

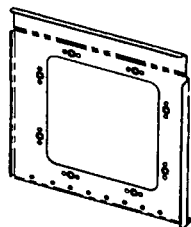
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



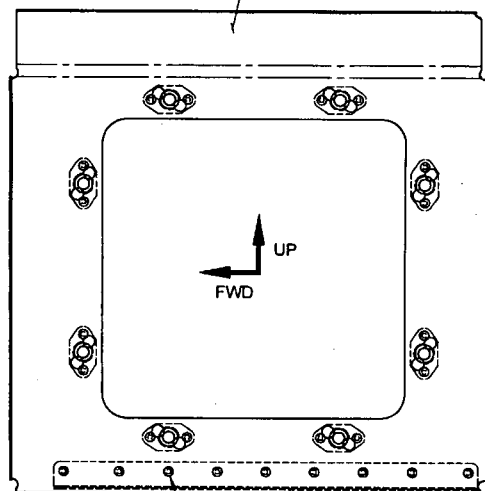
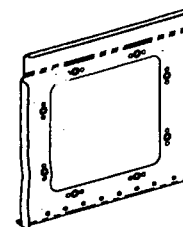
D3245-1
PANEL

2350-18-C3Y DZUS
RIGID RECEPTACLE (1)
MS20427M3-3 RIVET (2)
(8 PLACES)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
WITHOUT NOTICE
WORK ORDER
NO. 63403
BS10-11-04

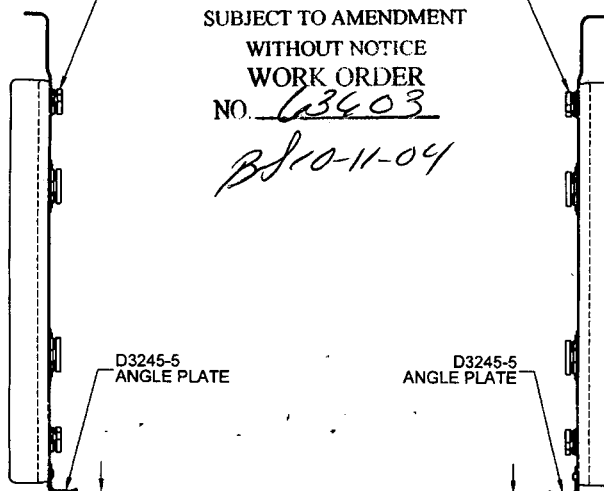
2350-18-C3Y DZUS
RIGID RECEPTACLE (1)
MS20427M3-3 RIVET (2)
(8 PLACES)

D3245-2
PANEL



MS20615M3-3 RIVET
(9 PLACES)

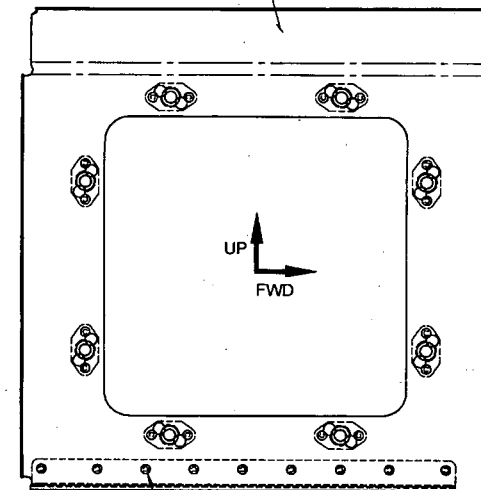
D3245-041 ACCESS PANEL ASSEMBLY



0.032
GAP

D3245-5
ANGLE PLATE

0.032
GAP



MS20615M3-3 RIVET
(9 PLACES)

D3245-042 ACCESS PANEL ASSEMBLY

RELEASED
07-10-23

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) ASSEMBLE IN ACCORDANCE WITH DART QSI 002
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3245-XX" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.83 lbs

QTY -041	QTY -042	P/N	DESCRIPTION
X		D3245-041	ACCESS PANEL ASSEMBLY, LH
	X	D3245-042	ACCESS PANEL ASSEMBLY, RH
1		D3245-1	PANEL
	1	D3245-2	PANEL
1	1	D3245-5	ANGLE PLATE
8	8	2350-18-C3Y	DZUS RIGID RECEPTACLE
16	16	MS20427M3-3	RIVET
9	9	MS20615M3-3	RIVET

B	REMOVE Ø0.204 HOLES FROM D3245-1/1F. REMOVE MS21060-L3K NUTPLATES & DURABLE BLACK GASKETS FROM D3245-041/042. HOLES AND ITEMS ARE NOW PART OF INSTALLATION. ASSIGN P/Ns TO GASKETS & REFORMAT DRAWING	MB	07.10.02
A	NEW ISSUE	RF	04.01.27
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>PH</i>	DART AEROSPACE LTD	
DRAWN	<i>PH</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>PH</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>PH</i>	D3245	SHEET 1 OF 7
APPROVED	<i>PH</i>	TITLE	SCALE
DE APPR.	<i>PH</i>	ACCESS PANEL ASSEMBLY	1:2.5
DATE	07.10.02	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

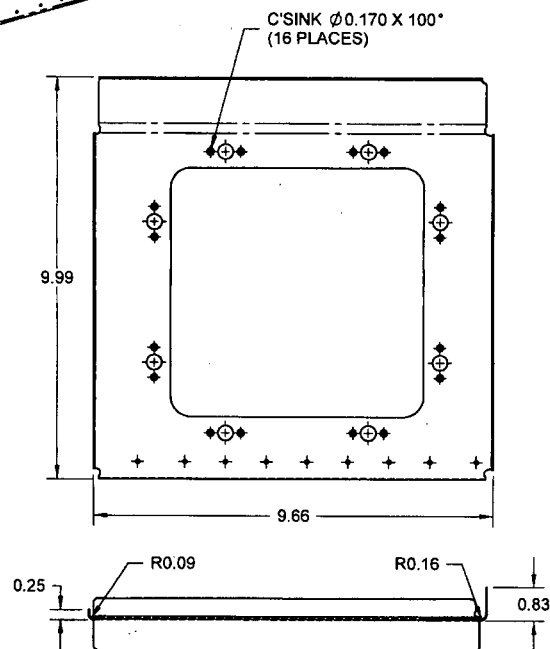
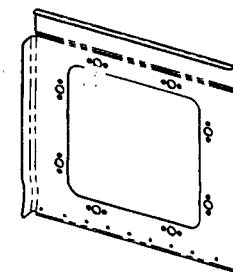
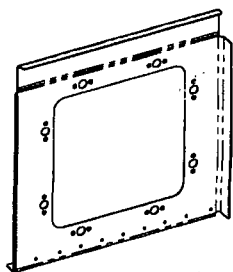
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

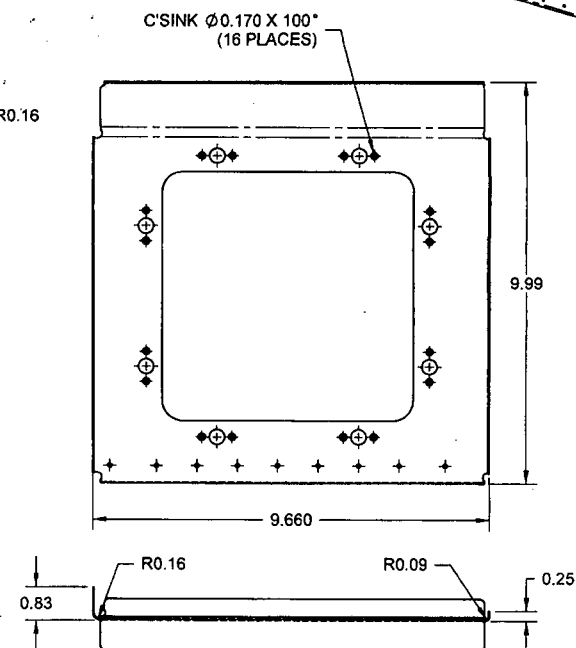
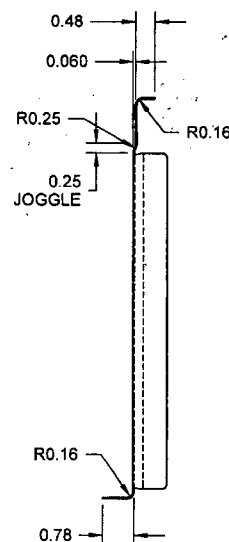
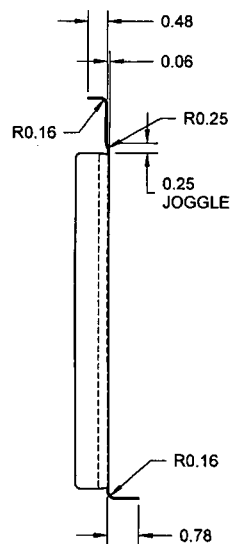
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3245-1 PANEL BEND DETAIL, LH



D3245-2 PANEL BEND DETAIL, RH

RELEASED
07-10-23

- NOTES:
- 1) MATERIAL: MAKE FROM D3245-1F
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.70 lbs

w/b 43403

DESIGN	JH	DART AEROSPACE LTD	
DRAWN	PH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. B
MFG. APPR.	IS	D3245	SHEET 2 OF 7
APPROVED	NO	TITLE	SCALE
DE APPR.	JH	ACCESS PANEL ASSEMBLY	1:3
DATE	07.10.02	COPYRIGHT © 2004 BY DART AEROSPACE LTD	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

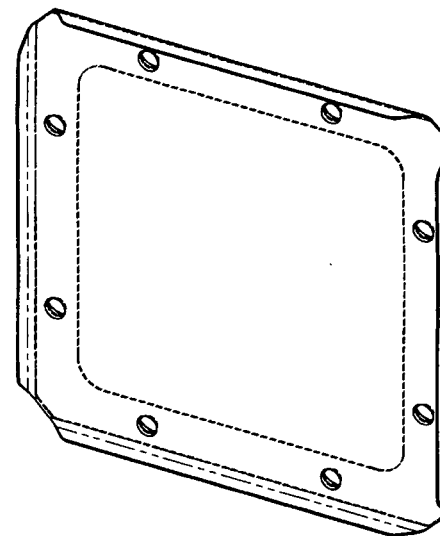
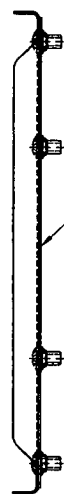
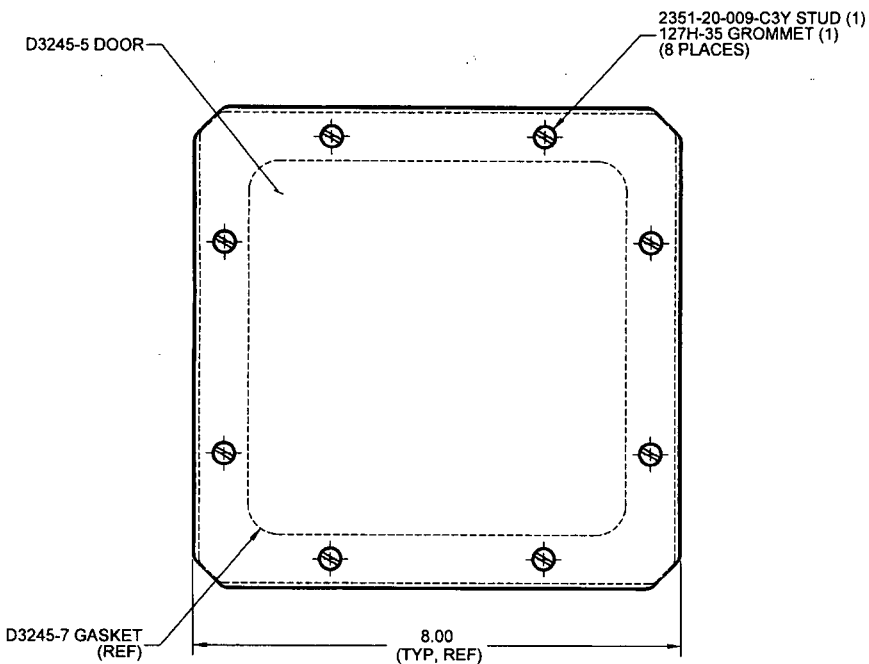
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D
C
B
A

D
C
B
A



D3245-043 DOOR ASSEMBLY

w/b 63463

QTY -043	P/N	DESCRIPTION
X	D3245-043	ACCESS PANEL ASSEMBLY
1	D3245-3	DOOR
1	D3245-7	GASKET
8	2351-20-009-C3Y	STUD
8	127H-35	GROMMET

RELEASED
77-10-33

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) INSTALL D3245-7 GASKET USING 3M SCOTCH-GRIP 1300/1300L ADHESIVE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS
- 7) ASSEMBLE IN ACCORDANCE WITH DART QSI 002
- 8) IDENTIFICATION: IDENTIFY WITH DART P/N "D3245-043" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER
- 9) WEIGHT: 0.73 lbs

DESIGN	<i>TH</i>	DART AEROSPACE LTD	
DRAWN	<i>PH</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>PH</i>	DRAWING NO. D3245	REV. B
MFG. APPR.	<i>PH</i>		SHEET 3 OF 7
APPROVED	<i>PH</i>	TITLE	SCALE
DE APPR.	<i>PH</i>	ACCESS PANEL ASSEMBLY	1:2
DATE	07.10.02	COPYRIGHT © 2004 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

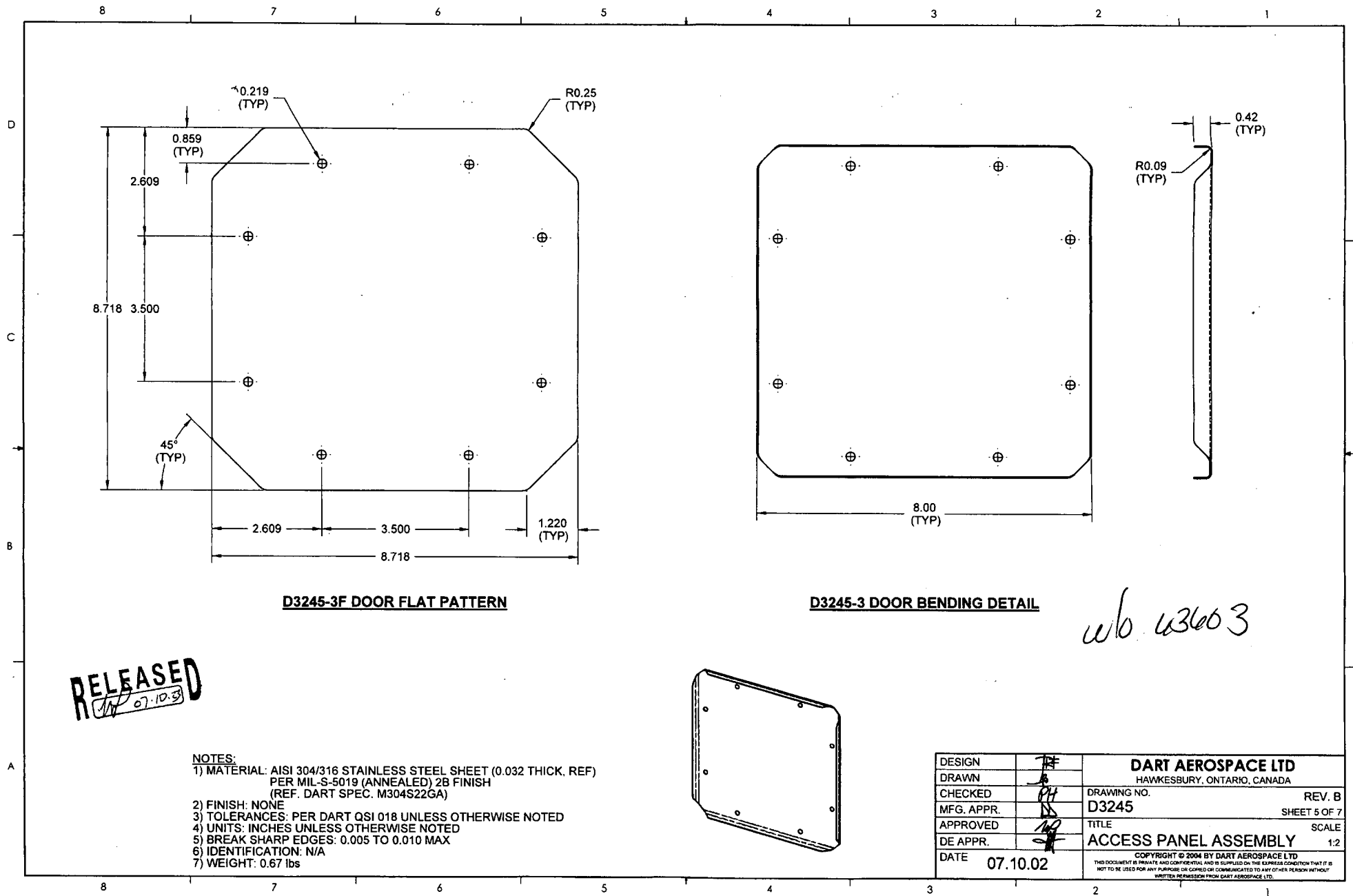
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

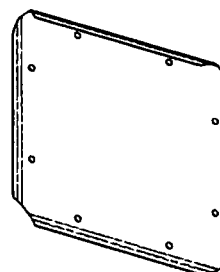








D3245-3F DOOR FLAT PATTERN

D3245-3 DOOR BENDING DETAIL

RELEASED
 07-10-03

- NOTES:
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET (0.032 THICK, REF) PER MIL-S-5019 (ANNEALED) 2B FINISH (REF. DART SPEC. M304S22GA)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.67 lbs



DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3245	SHEET 5 OF 7
APPROVED		TITLE	SCALE
DE APPR.		ACCESS PANEL ASSEMBLY	
DATE	07.10.02	1:2	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

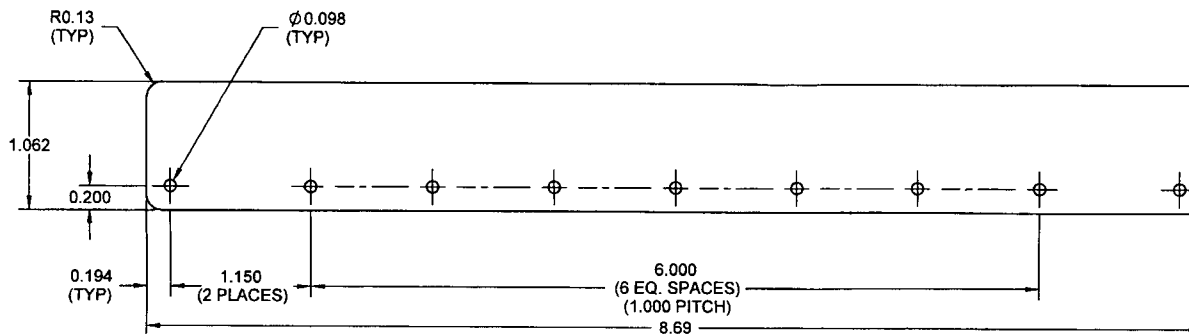
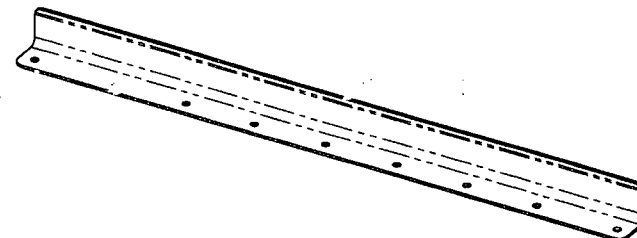
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

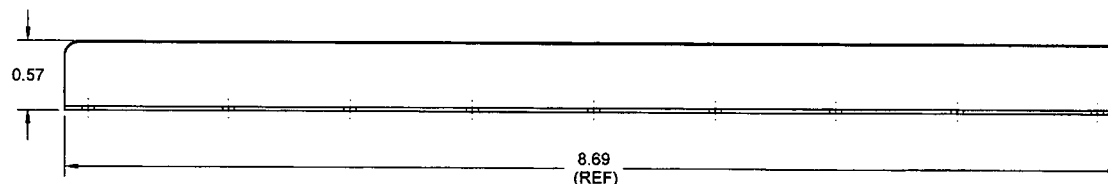
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

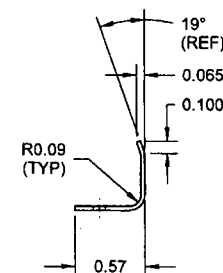
8 7 6 5 4 3 2 1



D3245-5F FLAT PATTERN



D3245-5 BEND DETAIL
(MAKE FROM D3245-5F)



RELEASED
07.10.23

WLB 43603

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET (0.032 THICK, REF)
PER MIL-S-5019 (ANNEALED) 2B FINISH
(REF. DART SPEC. M304S22GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.08 lbs

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	PH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. B
MFG. APPR.	PH	D3245	SHEET 6 OF 7
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	ACCESS PANEL ASSEMBLY	1:1
DATE	07.10.02	<small>COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries